

Invasive Plant Control Workshop **CUT-STUMP HERBICIDE APPLICATOR**

Parts (diagram attached):

- 1 .1 inch diameter PVC threaded male cap
- 1 .1 inch diameter PVC threaded female cap
- 1 .3/4 inch diameter PVC cap, unthreaded
- 1 .1 inch diameter PVC threaded female coupling
- 3 .1 inch diameter PVC threaded male couplings
- 1 .1 inch diameter PVC 45° elbow coupling, unthreaded
- 1 .1 inch diameter PVC threaded ball valve
- 1 .1 inch diameter PVC pipe (12 to 15 inches)
- 2 .1 inch diameter PVC pipe pieces, approximately 1 inch long
- 4 .1 1/4 inch diameter rubber lavatory gaskets
- heavy duty sponge (2 x 4 x 1 1/2 inches)
- PVC cement
- PVC pipe cutters or hacksaw
- Drill, 1/16 inch bit, 3/4 inch bit
- Ruler
- Scissors

Assembly Instructions:

Cement threaded male coupling onto one end of a length of PVC pipe (12 to 15 inch length suggested); cement the threaded female coupling on the other end of PVC pipe (reservoir). Additional PVC sections can be made that can be threaded together to make a longer handle or reservoir when needed. Slip one rubber gasket over threaded male cap and attach to threaded female end of reservoir. Slip one rubber gasket over threaded male end of reservoir, and attach to one end of threaded ball valve. The rubber gaskets will allow the sections of applicator to be tightened together snugly so that no herbicide will leak out around course PVC threads.

To make the “drip holes” for herbicide, cut off the bottom of the 3/4 inch diameter PVC cap so that a flat disk remains. File disk until it fits snugly into the unthreaded 1 inch diameter PVC 45° elbow coupling; a ridge inside elbow will keep disk centered. Use a 1/16 inch drill bit to make two holes near the center of the disk. Cement the disk inside one end of the elbow coupling.

Using 1 inch diameter PVC pipe pieces (1 inch length or less), cement 1 inch diameter threaded male couplings onto each end of elbow. Slip rubber gaskets over each threaded male coupling. The end of the completed elbow without the drip holes disk attaches to the other end of the ball valve.

Drill a 3/4 inch hole into the end of the 1 inch diameter PVC threaded female cap. The sponge tip twists into this 3/4 inch hole, and this cap is then threaded onto the end of the elbow with the drip holes disk.

The sponge tip, which is roughly 1 inch diameter by 1 1/2 inch length, can be cut with scissors; or a 1 inch diameter metal pipe section that is sharpened on one end can be used to rapidly cut out numerous sponge tips. Wet sponge tip before twisting it into threaded female cap with 3/4 inch hole. Allow 1/4 to 1/2 inch of sponge to extend out of tube to treat stump tops.

To Use:

With ball valve in "OFF" or "CLOSED" position, pour herbicide mix in reservoir and close with threaded male cap (the top of applicator). Open ball valve, then slightly open threaded male cap to allow air into the reservoir. Once sponge tip begins to saturate, tighten threaded male cap and close ball valve. When sponge is saturated only a light touch on top of stump is needed. Open ball valve when more herbicide is needed in sponge tip.

Helpful Hints:

During colder weather the ball valve may have to be left open to allow enough herbicide to saturate sponge. Drip holes can also be made larger if faster herbicide flow is desired.

Do not allow left-over herbicide mix to remain in reservoir in very hot or freezing conditions.

Always clear drip holes of any residue before using applicator again (a paper clip works well)

When sponge becomes worn, replace it (recommended after every work day at minimum).

When using applicator during freezing conditions, duct tape a disposable chemical hand warmer around the drip hole disk location to reduce the chance of drip holes freezing shut.

Use a herbicide dye to check for leaks, appropriate stump applications, and any exposure to person using applicator.

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